

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2000-170-E - ORDER NO. 2000-544
JUNE 28, 2000

IN RE:	Application of South Carolina Electric & Gas)	ORDER
	Company for a Certificate of Environmental)	GRANTING
	Compatibility and Public Convenience and)	CERTIFICATE
	Necessity for the Acquisition, Installation and)	
	Operation of two 150 MW, Combined Cycle)	
	Gas Turbines at its Urquhart Plant in Aiken)	
	County, South Carolina.)	
)	

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina (the Commission) on the Application of South Carolina Electric & Gas Company (SCE&G or the Company) for a Certificate of Environmental Compatibility and Public Convenience and Necessity to acquire, install and operate two 150 MW combined-cycle gas-powered turbines and associated transmission facilities (the Project) at the site of its Urquhart Plant in Aiken County, South Carolina. The Application was filed pursuant to the provisions of S.C. Code Ann. Section 58-33-10 et seq. (1976) (Supp. 1998).

The Application contains a Statement of Need for the project. According to that Statement, the Company currently has a net generating capacity from units on its system of 4,518 megawatts, consisting of 635 megawatts at V.C. Summer Nuclear Plant, 2,740 megawatts at 8 coal and steam generating plants, 771 megawatts at 6 hydro plants and 372 megawatts of peaking combustion turbine capacity at various locations throughout its

system. Including power available under long-term purchase agreements with other utilities and non-utility generators, the Company has a total capability of 4,543 megawatts available for the summer of 2000.

Further, according to the Statement of Need, in the period 1995-1999, SCE&G's system-wide electric sales grew by 11.1% to 20.018 billion kilowatt hours (KWH). The Company's electric customer base grew by 6.1%. Over the last four years, total electric customers and KWH sales increased at average annual rates of 1.5% and 2.7% respectively. SCE&G's total territorial energy needs are projected to increase at an annual rate of 2.4% from 2000 to 2004.

Further, the Company's peak demands are forecasted to increase by 896 megawatts during the next decade. According to the Company, without the additional capacity promised by the proposed plant, SCE&G will not be able to meet the increasing need for power and assure system reliability. In order to provide the necessary generating capacity and to assure reliable electric source to its customers, the Company proposes to install two (2) new General Electric 7FA turbine generators rated at approximately 150 megawatts each at its Urquhart Station in Aiken County, South Carolina. Additionally, two of the existing Urquhart steam turbine generators, with a capacity of approximately 75 MW each, will be repowered by steam produced in two (2) new heat recovery steam generators utilizing the exhaust energy from the two new combustion turbines. An inlet chiller for the combustion turbines will be installed to provide an additional 41 MW capacity during the summer peaking months. The total combined-cycle capacity for these units will be approximately 491 MW, according to the testimony.

With regard to notice, a copy of the Application was served on the Chief Executive Officer of each municipality and the head of each state and local government agency charged with the duty of protecting the environment or planning land use in the area in the county in which any portion of the facility is to be located. Further, notice was given to persons residing in the municipalities entitled to receive such notice pursuant to S.C. Code Ann. Section 58-33-120(3)(1976) by publication of a summary of the application and the date on which it was or was about to be filed in newspapers of general circulation. The Company furnished affidavits of publication to show publication of the Notice. A Petition to Intervene was received from the Consumer Advocate for the State of South Carolina.

Accordingly, a hearing was held on June 14, 2000 at 10:30 AM in the offices of the Commission, with the Honorable Philip T. Bradley, presiding. South Carolina Electric & Gas Company was represented by Francis P. Mood, Esquire. The Company presented the testimony of Neville O. Lorick, Joseph M. Lynch, Abney A. (Skip) Smith, Jr. (Direct and Rebuttal), John W. Preston, Jr., Charles A. White (Direct and Rebuttal), and Julius A. Wright (Rebuttal Only). The Consumer Advocate was represented by Hana Williamson, Esquire and Nancy V. Coombs, Esquire. The Consumer Advocate presented the direct and surrebuttal testimony of Peter J. LanzaLotta. The Commission Staff (the Staff) was represented by F. David Butler, General Counsel. The Staff presented the testimony of A.R. Watts.

II. SUMMARY OF TESTIMONY

Neville O. Lorick, Vice-President of the Fossil & Hydro Strategic Business Unit (SBU) for the Company, presented an overview of the comprehensive planning that the Company has undertaken in connection with the Urquhart Re-powering Project (the Project). Lorick explained how SCE&G arrived at the decision embodied in the Application, and why the decision, in his opinion, best addresses the needs of the Company and the Company's customers.

Lorick noted that the decision of SCE&G was to acquire and install two new combustion turbine-generators at the Urquhart Station in Beech Island, Aiken County, South Carolina. Lorick then provided an introduction to the witnesses following him to the stand and a brief summary as to the contents of their testimony.

Lorick discussed how SCE&G initiated the process that led to the decision for the Project. The process emerged from SCE&G's annual load and resource forecast. Projections of growth in peak demand on the Company's system after the year 2000 show that the Company expects a supply shortfall of 268 megawatts by 2002 and 460 megawatts by 2004. Thus, the numbers indicate the need for additional capacity. Lorick noted that the current minimum reserve margin is 497 megawatts. In order to address these needs, the Company issued a Request for Proposals (RFP) to purchase the supply capacity and initiated analyses regarding the requirements and feasibility of self-building additional generation. Lorick went on to explain the nature of the RFP, the method of distributing it, and the analyses of the proposals received. Based on analyses by Dr. Joe Lynch, the Company decided that self-building two 150 megawatt simple cycle gas

turbines in South Carolina would meet the Company's objectives of reliable and economical generation capacity better than the other proposals received by way of the RFP. Lorick noted that further evaluation and consideration of the aging Urquhart Units 1 and 2 in a combined cycle configuration would be most beneficial. Natural gas is available to power the turbines. Lorick noted that the Company was now requesting that the Commission approve the Urquhart Re-Powering Project.

Dr. Joseph M. Lynch, Manager of Resource Planning for SCE&G, presented the Company's load and resource forecast and reserve margin requirements to attempt to demonstrate the need for additional capacity and to attempt to show that the proposed Urquhart Re-powering Project is the most cost effective option. Lynch discussed the Company's growth in peak demand. The Company expects the historical growth in peak demand to continue. The average annual change in peak demand over the 15-year period from 1985 to 1999 was 104 megawatts per year and the average change over the next 10 years from 2000 to 2009 is forecasted to be 100 megawatts per year.

Dr. Lynch testified as to the shortfalls to be seen by 2002 and 2004. He also describes how he forecasted the firm peak demand. Dr. Lynch also explained how the Company determined that the "self-build" option was superior to the RFP alternatives. The Company then developed three options under the "self-build" concept. Option 2 carried the present value of revenue requirements at \$357.3 million, which includes the carrying charges on the capital cost of the repowering, less those costs related to the chiller. Annual expenses related to the cost of firm transportation of gas were also included as part of Option 2 costs. The Company is planning to purchase 50,000

dekatherms of firm transportation capacity. Overall, Option 2 was the least costly option over the long run, and this option became the preferred option of the Company.

Abney A. (Skip) Smith, Jr., Project Manager for the Urquhart Re-Powering Project, presented direct and rebuttal testimony. Smith's direct testimony presented a general description of the proposed Project, described the arrangements entered into by SCE&G and Duke-Fluor Daniel with respect to the engineer, procure, construct (EPC) contract, and provided information regarding the cost of the proposed facility.

Smith testified that SCE&G plans to install two new combustion turbine-generators at the Company's Urquhart Station, located at Beech Island, Aiken County, South Carolina. The turbine-generators will be General Electric 7FA turbine-generators rated at approximately 150 MW each. Two of the existing Urquhart steam turbine-generators, with a capacity of approximately 75 MW each, will be repowered by steam produced in two new heat recovery steam generators using the exhaust energy from the two new combustion turbines. Also, an inlet chiller for the combustion turbines will be installed to provide an additional 41 MW capacity during the summer peaking months. The total combined-cycle capacity for these units will be approximately 491 MW.

Further, according to Smith, energy from the new heat recovery steam generator will also be used to provide feedwater heating for the existing Urquhart Unit #3. The existing coal-fired boilers for Units 1 and 2 will be shut down. Unit #3's coal-fired boiler will continue to operate. The combined-cycle units will be capable of firing natural gas or distillate (No. 2) fuel oil, with natural gas being the primary fuel. Smith then provided a general description of how the production system will work, and the process used by the

Company to enter into a contract arrangement with Duke/Fluor Daniel for an EPC contract.

Smith states that the EPC contract is a comprehensive document setting forth in detail the requirements and criteria for the design, procurement, construction, operator training, testing and commissioning of the combined-cycle facility. It defines the risks for each party, the responsibilities of each party, the terms of payment, warranties, guarantees, and the remedies for failure to perform. The EPC contract is based on a lump sum price that includes escalation.

Smith testified that the total price of the plant is \$255,996,641. This price includes an EPC contract price with Duke/Fluor Daniel of \$200,288,400, a project management cost of \$27,699,600, a cost of \$5,037,400 for the new substation and transmission upgrade, and \$22,971,251 for AFUDC. Smith stated his belief that the total project will give the Company a facility with reliable and efficient capacity just under 600 MW at a reasonable cost.

John W. Preston, Jr., Senior Engineer in the Corporate Environmental Services Department and Section Head of the Generation Support Group of SCE&G testified as to the environmental matters related to the Project. According to Preston, there are several environmental advantages to the proposed Project. First, site utilization is present already. SCE&G has operated three coal-fired boilers at the Urquhart site for over 45 years. Preston states that an existing site such as Urquhart is preferable over a new undeveloped site, since the history of industrial activity has already been established. Preston cites a second advantage as being a significant reduction in nitrous oxides, sulfur dioxide, and

particulate matter emissions as a result of retiring two coal-fired boilers and replacing them with units fired by natural gas and #2 fuel oil. A reduction in nitrous oxides could reduce the risk of exceeding this new ozone standard proposed by the Environmental Protection Agency. The reduction in sulfur dioxide and particulate matter should also have a positive effect on the surrounding air quality.

Preston notes that a complete application, including an air quality analysis, a secondary impacts analysis, and a Class I Area impact review have been submitted to the South Carolina Department of Health and Environmental Control's (SCDHEC's) Bureau of Air Quality. An air quality analysis has been performed for the new combustion turbines as well as the impact of retiring the existing #1 and #2 boilers. According to Preston, the air permit application demonstrates that the proposed changes of the re-powering project will be in full compliance with applicable state and federal air pollution control requirements, based on the worst case scenario of #2 fuel oil firing. Since the project proposes a change in fuel from coal to natural gas and #2 fuel oil, significant reductions in nitrous oxides, sulfur dioxide, and particulate matter emissions will result.

A secondary impacts analysis and a Class I Area impact review were conducted to evaluate potential impacts on soil, vegetation, visibility, and potential associated economic growth. No areas of concern were identified. Impacts to Class I Areas that exhibit pristine air quality are not anticipated from this project, since the nearest Class I Areas are over 200 kilometers (125 miles) from Urquhart Station. Preston notes that the amount of coal stored on site will also be reduced. Further, the impact of wastewater discharges on the Savannah River will modestly improve in that the amount of water used

within the new facility will be reduced because of fewer wash-downs, fewer floor drains, reduced coal pile runoff, and other matters.

Preston discusses the fact that SCE&G must also apply for approval from other regulatory agencies at the federal, state, and local levels, at the same time as it undergoes the review process before this Commission, and that various other permits are required before the Project can begin operation.

Charles A. White, General Manager, Transmission Planning and System Control for SCE&G testified regarding the need and necessity for the associated new 230 kV transmission facilities. According to White, the Urquhart Re-powering Project will require two new 230 kV transmission lines originating at SCE&G's Urquhart Station and connecting to the existing grid at Urquhart Junction. These two transmission lines will connect to the existing Graniteville to Savannah River Site 230 kV transmission line which passes through Urquhart Junction. The two new transmission lines will be constructed with 1272 KCM (thousand circular mills) ACSR (Aluminum Conductor Steel Reinforced) and will be approximately 6.3 miles in length. These lines are needed, according to White, to connect the two new 150 MW gas-fired turbines associated with the Urquhart Re-powering Project into the SCE&G power grid to assure system reliability and to satisfy growing power requirements. White notes that the new generating capacity and associated transmission lines provide added support to the western area of SCE&G's service area.

White states that the proposed 230 kV transmission lines will be located within the same right-of-way with four existing 115 kV transmission lines. Constructing the

proposed 230 kV transmission lines on existing cleared right-of-way minimizes any environmental effects. According to the study that was done on the effects of the proposed lines on the environment, the line will have no significant effects on land use, vegetation, wildlife, or threatened and endangered species. No archeological sites will be disturbed by the lines.

Finally, White notes that the two 230 kV transmission lines will cost approximately \$3,087,400 and the substation at Urquhart Station will cost approximately \$1,950,000, for a total estimated cost of \$5,037,400 for this portion of the project.

The Consumer Advocate presented the testimony of Peter J. Lanzalotta, a consultant from Whitfield Russell Associates. Lanzalotta takes issue with the process which was followed by SCE&G to arrive at the current situation, but states that it may be in the public interest to approve the proposed Urquhart Re-powering Project. Based on the Company's testimony, Lanzalotta concludes that it appears likely that the capacity addition will be needed to serve the loads of ratepayers in South Carolina and provide additional benefits to the integrated operation of the electric utility system. Lanzalotta expresses his concern that the option selected may have impacts upon reliability that have not been adequately addressed by SCE&G in its filing. Given the fact that this project is being advanced primarily to address peak demands on the SCE&G system, the proposed configuration, according to Lanzalotta, may result in a supply source that has greater risks than those under an alternative supply scenario. Lanzalotta then suggests three stipulations be made before any approval of the system is given by this Commission. The first proposed stipulation is that this project should be approved by the Commission with

the acknowledgment by SCE&G that at no time in the future will the Company seek to claim any costs associated with the project as being stranded costs which need to be recovered from ratepayers of the State of South Carolina. The second stipulation is that SCE&G will warrant to the Commission, subject to financial penalty provisions, that the re-powered turbines will perform at least as well as the operation simulated in the studies which have been performed to justify the capital expenditure. The third stipulation is that the Commission order SCE&G to present reliability studies which demonstrate that the increased concentration at Urquhart does not create adverse reliability to ratepayers in South Carolina.

With regard to the first stipulation, LanzaLotta contends that this project is being proposed with full knowledge of the changes which have, and are currently occurring in the electric utility industry. He states that if SCE&G feels that uncertainty would dictate that the risks of a new power plant construction would result in excessive future power costs, then SCE&G should be seeking to avoid these risks now on behalf of the ratepayers. LanzaLotta states that by going forward with plant construction, SCE&G should be willing to bear these risks and should not seek to impose them upon the ratepayers either now or at some future time. With regard to the second stipulation, LanzaLotta states that it is not uncommon in the electric utility industry for suppliers of power to agree in advance to minimum levels of performance in order to obtain payments for financing the construction of power plants. The basis for this need, according to LanzaLotta, is that operation of the plant may entail a large number of duty cycles, and that older equipment is involved. LanzaLotta proposes that SCE&G waive any pass

through of costs for energy and of capacity needed to replace the output of this plant due to failure of the Urquhart steam turbines for a period of 10 years, along with the costs of any non-routine maintenance expenses. With regard to the third stipulation, Lanzalotta states a belief that, under the present re-powering plan, the existing Urquhart units 1 and 2 would become dependent upon the operation of the new generation being constructed. Lanzalotta theorizes that this creates a situation in which the capacity that may be lost in the event of a single outage to become a “common mode” event. Lanzalotta expresses the concern about the effect of this on reliability, and recommends that the Commission order SCE&G to present reliability studies which demonstrate that the increased concentration at Urquhart does not create adverse reliability to ratepayers in South Carolina.

The Commission Staff presented the testimony of A.R. Watts, Chief of Electric in the Utilities Department of the Commission. Watts confirmed that SCE&G complied with the filing requirements contained in the Siting Act, S.C. Code Ann. Section 58-33-10, et seq. Watts recounted the history of this case, and stated that no comments were filed with the Commission by any of the parties or interested persons as the result of the notices. Watts summarized his testimony by stating that SCE&G has satisfied the requirements of the Siting Act up to this point in the process.

Abney A. (Skip) Smith presented rebuttal testimony regarding the direct testimony of Consumer Advocate witness Lanzalotta. With regard to the issue of duty cycles, Smith outlined the actions that the Company was taking to address this issue. With regard to the “common mode” event question raised by Lanzalotta, Smith testified that the Company

has concluded that the existing plant equipment will operate reliably, based on studies, evaluations, and decisions performed and made by the Company.

Charles A. White also filed rebuttal testimony on the issue of “common mode” failure. White stated that there are alternate transmission lines in place if the primary lines failed, for whatever reason. SCE&G’s transmission lines have been tested in this matter, and no violations of required transmission performance was determined.

Julius A. Wright, PhD filed additional rebuttal testimony on behalf of the Company to further discuss Consumer Advocate witness Lanzalotta’s proposals. First, Wright disagrees with the recommendation that the Urquhart project should be removed from any future consideration of SCE&G’s stranded costs. Wright stresses that the recommendation ignores the basic rules under which the electric utilities operate today in South Carolina. Under the present system, a utility is allowed to recover its prudent and reasonable costs when it provides its services. Second, Wright opines that adoption of Lanzalotta’s recommendation will discourage the construction of new generation by the electric utilities.

Wright also disagrees with Lanzalotta’s recommendation that SCE&G should provide guarantees, subject to financial penalties, regarding the proposed project’s performance. Wright notes that the Company has already instituted contractual arrangements that seek to achieve the objective of this recommendation. Lastly, Wright disagrees with Lanzalotta’s comments with regard to the Company’s not securing years ago options to build combustion turbines today.

Finally, Consumer Advocate witness Lanzalotta presented surrebuttal testimony. With regard to Company witness Whites's rebuttal, Lanzalotta expresses a concern that there is not any evidence in the record that SCE&G conducted any power reliability studies with consideration of the impact upon reliability that would result from siting new generation at diverse sites rather than concentrating it at a single location. Second, Lanzalotta expresses concern as to why transmission lines need to be upgraded for the project if ample transmission capability already exists for the project.

With regard to Company witness Smith's rebuttal testimony, Lanzalotta notes that if the Company is confident as to its ability to operate the plant in accordance with their plans, then the Company should be willing to provide the guarantees requested.

Answering the rebuttal testimony of Company witness Wright, Lanzalotta contends that competition in the electric utility industry is a matter of fact, although it is implemented in a greater or lesser degree in various regulatory jurisdictions. For example, Lanzalotta points out the RFP process used by the Company for this project. Lanzalotta also comments on various other aspects of the rebuttal testimony of the Company witnesses.

III. FINDINGS OF FACT

1. The Company proposes to install two (2) new General Electric 7FA turbine generators rated at approximately 150 megawatts each at its Urquhart Station in Aiken County, South Carolina. In addition, SCE&G proposes to re-power two of the existing Urquhart steam turbine generators, with a capacity of approximately 75 megawatts each, with steam produced in two (2) new heat recovery steam generators

utilizing the exhaust energy from the two new combustion turbines. Also, an inlet chiller for the combustion turbines is proposed to be installed which would provide an additional 41 MW capacity during the summer peaking months. The total combined cycle capacity for these units will be approximately 491 MW, according to the testimony. (Direct testimony of Smith at 2-3.) We believe that this proposal should be approved, as it will serve the interests of system economy and reliability. (Direct testimony of White at 4.)

2. The total price of the proposed plant is \$255,996,641. (Direct testimony of Smith at 13.) With carrying costs on the capital cost of re-powering, less costs related to the chiller, plus costs of the firm transportation of gas for powering the turbines, the cost of the project is \$357.3 million. (Testimony of Lynch at 9.) We take no position on the costs of the project at this time, but state that the Company may apply for rate coverage later at the appropriate time, and may attempt to justify the costs stated herein.

3. The annual load and resource forecast of SCE&G shows that projections of growth in peak demand on the Company's system after the year 2000 shows a supply shortfall of 268 MW by 2002 and 460 MW by 2004. Additional capacity is therefore needed to meet these shortfalls, and also to maintain a minimum reserve margin. The average change over the next 10 years from 2000 to 2009 is forecasted to be 100 megawatts per year. (Testimony of Lorick at 3 and Lynch at 2-6.)

4. The Company proceeded with two steps in order to determine what type of supply to add. First, the Company determined whether it was better to purchase the supply capacity or to build a new unit. SCE&G issued an RFP. After examination of the RFP's submitted, the Company decided that the self-build option was the better

alternative, due to expense, reliability, availability, and other factors as discussed in the testimony. The second step was where SCE&G decided what type of capacity to build. The Urquhart Re-powering Project as described in Paragraph 1 resulted from a consideration of a number of factors, including the ability with the Urquhart Re-powering Project to use the same capital dollars to meet the Company's capacity needs as well as to address various environmental issues. (Testimony of Lynch at 7-9.)

5. The Commission concludes that there are a number of environmental advantages to the proposed project. Site utilization is present already. This allows the building of additional facilities on a site that is already being utilized for electric purposes. Second, under the project, there is a significant reduction in nitrous oxides, sulfur dioxide, and particulate matter emissions as the result of retiring two coal-fired boilers and replacing them with units fired by natural gas and #2 fuel oil. No areas of concern were identified on a Class I Area impact review which was conducted to evaluate potential impacts on soil, vegetation, visibility, and potential economic growth. The amount of coal on site will be reduced. The impact of wastewater discharges on the Savannah River will modestly improve. The Company is seeking various other permits from various State and Federal agencies. (Testimony of Preston at 2-5.)

6. Two new 230 kV transmission lines originating at SCE&G's Urquhart Station and connecting to the existing grid at Urquhart Junction will be needed for the new project. The two new lines will be located within the same right-of-way with four existing 115 kV transmission lines, therefore there is minimal environmental impact. The lines will have no significant effects on land use, vegetation, wildlife, or threatened and

endangered species. No archaeological sites will be disturbed by the lines. The cost of the two new lines will be approximately \$3,087,400 and the substation at Urquhart Station will cost approximately \$1,950,000, for a total cost of \$5,037,400 for this portion of the project. (Testimony of White at 4-6). Again, we take no position as to the costs of the project at this time, but state that the Company may request rate coverage and may attempt to justify the costs herein later at the appropriate time.

7. The stipulations recommended by the Consumer Advocate's witness must be rejected. The first stipulation regarding approval by the Commission with the acknowledgment by SCE&G that at no time in the future will the Company seek to claim any costs associated with the project as being stranded costs is out of sync with the nature of the electric industry in South Carolina today. Despite the fact that competition in the electric industry is present in some jurisdictions, an electrical utility in South Carolina will still be allowed to recover its prudent and reasonable costs, (as determined by the Commission), when it provides its services in its franchised territory. (Rebuttal testimony of Wright at 2.) Requiring the Company to decline to ever claim costs associated with this project as stranded costs is antithetical to our continued rate of return rate based regulation of electrical utilities. Under our system of regulation, the Company is certainly free to claim the costs of this project at the proper time. We also decline to adopt the recommendation for policy reasons, in that a ruling in keeping with the Consumer Advocate's recommendation would discourage the construction of generation plant in South Carolina.

We also decline to adopt the Consumer Advocate's stipulation regarding SCE&G providing guarantees, subject to financial penalties, regarding the proposed project's performance. As Dr. Wright points out, the Company has already instituted contractual arrangements that seek to achieve the objective of this recommendation, as discussed in the testimony of Company witness Smith. (Rebuttal testimony of Wright at 2.) In addition, although LanzaLotta suggests penalties for failure to achieve targeted performance, he suggests no rewards for exceeding targeted performance. The Company's proposal actually penalizes the contractor for failure to perform and passes the payments on to the ratepayer, and, at the same time, any above-target-level performance works to the benefit of the ratepayers. (Rebuttal testimony of Wright at 3.) Also, LanzaLotta's "duty cycle" concerns were addressed properly in the rebuttal testimony of Company witness Smith. We do not share the perceived difficulties of the Consumer Advocate's witness in this area.

Nor do we share his concern, or adopt the Consumer Advocate's view with regard to his third proposed stipulation. This proposal appears to be based on the belief that, under the re-powering plan, the existing Urquhart units 1 and 2 would become dependent upon the operation of the new generation being constructed. The perceived difficulty is the theory that the capacity may be lost in a single outage to become a "common mode" event. LanzaLotta raises reliability concerns under this scenario. It appears to us that the rebuttal testimony of Company witness White answers these concerns. White notes that there are alternate transmission lines in place if the primary lines failed, for whatever reason. The Company has performed tests on these lines with this scenario in mind, and

no violations of required transmission performance was determined. (Rebuttal testimony of White at 2.) The third stipulation request is therefore rejected.

IV. CONCLUSIONS OF LAW

1. The Company has complied with all requirements of the Utility Facility Siting and Environmental Protection Act, S.C. Code Ann. Section 58-33-10, et seq. (1976) (Supp. 1999). See testimony of Commission Staff witness Watts.
2. The Application of the Company is granted as filed.
3. A certificate of environmental compatibility and public convenience and necessity is hereby granted for the project.
4. SCE&G has established a basis for the need for the facility. See Finding of Fact No. 3 above. The Company has established that a shortfall in the ability of the Company to generate electricity may well result in the future without the construction of the Urquhart Re-powering Project.
5. The nature of the probable environmental impact is minimal. See Finding of Fact No. 5 above. In fact, there appear to be several environmental advantages with the construction of the Urquhart Re-powering Project, considering the fact that two coal-fired boilers are being retired as part of the project.
6. The impact of the facility upon the environment is justified, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. See Findings of Fact Nos. 4 and 5 above and pertinent testimony.

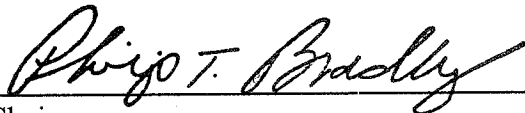
7. The facilities will serve the interests of system economy and reliability. See Findings of Fact Nos. 1, 3, and 4 above. Clearly, the Urquhart Re-powering Project is needed to assure system reliability. The project also is the most economical method for providing additional needed power to the system, according to the testimony. See testimony of Lynch at 8 and 9. Also, we do not believe that the Consumer Advocate's "hindsight" view is availing. Rebuttal testimony of Wright at 10-11. It appears that the price that the Company paid for the necessary equipment was not prejudiced because the Company did not reserve its options to buy turbine equipment today. Testimony of Lorick.

8. With regard to applicable State and local laws and regulations issued thereunder, the only evidence presented indicated concerted efforts by the Company to comply with permitting and regulatory requirements. Testimony of Lorick at 11; testimony of Preston; testimony of White at 5-6.

9. The public convenience and necessity require the construction of the facility. We conclude, based on the testimony of the witnesses and the evidence in this case as a whole that the construction of this facility is needed in order to generate needed amounts of electricity and overcome the forecasted shortfalls and meet a proper reserve margin. We believe that without the facility, SCE&G will face an inability to generate needed amounts of electricity and will not be able to meet the growth in peak demand in the future, much less retain a proper reserve margin. The re-powering project is needed to properly serve the public.

10. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:


Chairman

ATTEST:


Executive Director

(SEAL)